

LEBEDINSKIY, A. V.

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Kurs normal'noy fiziologii (Course in normal physiology, by) A. G . Ginetsinskiy i
A. V. Lebedinskiy. Moskva, Medgiz, 1956.

534 p. illus., diags., graphs, tables.

LEBEDINSKIY, A. V.

BAKULEV, A.N., glavnyy redaktor; ANICHKOV, N.N., redaktor; BOLDYR'EV, T.Ye., redaktor; BRUSILOVSKIY, L.Ya., redaktor; BYKOV, K.M., redaktor; VASIL'ENKO, V.Kh., redaktor; VINOGRADOV, N.A., redaktor; GRASHCHENKOV, N.I., redaktor; DAVYDOVSKIY, I.V., redaktor; ZDRODOVSKIY, P.F., redaktor; KAVETSKIY, R.Ye., redaktor; KOCHERGIN, I.G., redaktor; KROTKOV, F.G., redaktor; KUPRIYANOV, P.A., redaktor; LEBEDINSKIY, A.V., redaktor; MALINOVSKIY, M.S., redaktor; MAN'KOVSKIY, B.N., redaktor; NESTEROV, A.I., redaktor; ORBELI, L.A., redaktor; PAVLOVSKIY, Ye.N., redaktor; SEVERIN, S.Ye., redaktor; SKRYABIN, K.I., redaktor; SMIRNOV, Ye.I., redaktor; TIMAKOV, V.D., redaktor; TUR, A.F., redaktor; SHABANOV, A.N., redaktor

[Great Medical Encyclopedia] Bol'shaia meditsinskaya entsiklopediya. Glav.red. A.N.Bakulev. Chleny red.kolleгии E.N.Anichkov i dr. Izd. 2-oe. Moskva, Gos. izd-vo med. lit-ry. Vol. 1. A - Angiofibroma. 1956. 1216 columns. --- [Phonograph record and three-dimensional color spectacles] Grammofonnaia plastinka i ochki-svetofil'try, (MEDICINE--DICTIONARIES)

LEBEDINSKIY, A.V.

I.M. Sechenov in the Petersburg Academy of Medicine and
Surgery. Vop. 1st. est. i tekhn. no.1:82-97 '56. (MLBA 9:10)

(Sechenov, Ivan Mikhailovich, 1829-1905)

LEBEDINSKIY, A.V.

USSR/Human and Animal Morphology - Blood Circulation.

R-5

Abs Jour : Referat Zhur - Biologii, No 16, 70653

Author : Lebedinskiy, A.V.

Inst :

Title : The Reaction of Cardio-Vascular System on Ionisation-Radiation.

Orig Pub : Med. Radiologiya, 1956, 2, 3-9

Abstract : Survey of the action of ionization radiation on the cardio-vascular system.

Card 1/1

- 122 -

LEBEDINSKIY, Andrey Vladimirovich
LEBEDINSKIY, Andrey Vladimirovich, prof.; BENYUMOV, O.M., redaktor;
GUBIN, M.I., tekhnicheskiy redaktor.

[Effect of ionizing radiation on the organs of animals and men]
Vliyanie ioniziruyushchei radiatsii na organizm zhivotnogo i
cheloveka. Moskva, Izd-vo "Znanie," 1957. 55 p. (Vsesoiuznoe
obshchestvo po rasprostraneniю politicheskikh i nauchnykh znaniy.
Ser.8, nos.35/36) (MIRA 10:11)

1. Chlen-korrespondent AMN SSSR (for Lebedinskiy).
(RADIATION--PHYSIOLOGICAL EFFECT)

BAKULEV, A.N., glavnyy red.; ANICHKOV, N.N., red.; BOLDYREV, T.Ye., red.;
BRUSILOVSKIY, L.Ya., red.; BYKOV, K.M., red.; VASILENKO, V.Kh.,
red.; VINOGRADOV, N.A., red.; GRASHCHENKOV, N.I., red.; DAVYDOVSKIY,
I.V., red.; ZDRODOVSKIY, P.F., red.; KAVETSKIY, R.Ye., red.;
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LEBEDINSKIY, A.V., red.; MALINOVSKIY, M.S., red.; MAN'KOVSKIY, B.N.,
red.; NESTEROV, A.I., red.; ORBELI, L.A., red.; PAVLOVSKIY, Ye.N.,
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[The Great Medical Encyclopedia] Bol'shaia meditsinskaia
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N.N.Anichkov i dr. Moskva, Gos.izd-vo med.lit-ry. Vol.3.
B - Bogolepova. Izd.2-oe. 1957. 1176 columns. (MIRA 11:1)
(MEDICINE--DICTIONARIES)

LEBEDINSKIY, A. V. (Prof., Corr. Mem. Acad. Med. Sci. USSR)

"Radiation Trauma Due to the Effect of Various Types of Ionizing Radiation."

paper presented at 11th Session of General Conf. on the Problem of Trauma, Acad. Med. Sci. USSR, Moscow, 15 - 20 Apr 57.

Sovetskoye Zdravookhraneniye Kirgizii, Frunze, No. 6, Nov/Dec 57, pp 60-64.

LEBEDINSKIY, A.V.
Excerpta Medica Sec.3 Vol.12/7 Endocrinology July 20

1414. SOME NEURO-ENDOCRINE RELATIONS IN THE REACTION OF THE
ORGANISM TO IONIZING RADIATIONS (Russian text) - Lebedinskiy
A. V. - MED. RADIOL. 1957, 1 (35-41)

It is asserted that one of the essential stages in modern radiobiology is the disproving of the thesis of the radioinsensitivity of the nervous system. However, the connection between disturbances of function of the nervous system and the trophic changes in radiation sickness remains so far unstudied. Since the endocrine system is the link through which the nervous system can exert its influence on trophic processes, a study of the change in the activity of the endocrine glands would be of great interest. More attention has been given to the question of the participation

1979

of the adrenals in the reaction to irradiation. It has been shown by the polarographic method of Davydov that the blood of rabbits during the first few days after irradiation shows an increase in the adrenaline content, which then returns to normal, and then shortly before the animal's death there is a second wave of increase in adrenaline. As a result of irradiation the blood adrenaline may rise to 20 or more times its normal level. A fall in the cholesterol content of the adrenal cortex is observed, and also of the ascorbic acid, by from 40 to 70%, while there is an increase in the urinary corticoids. A number of investigators report an increase in the content of ACTH in the hypophysis and an increase in the functional activity of the thyroid gland. There are experimental investigations which demonstrate the neurogenic mechanisms of mobilization of the endocrine systems during irradiation. The work of Gorizontov and Livanov showed that after irradiation relative changes in the functional state of the hypothalamic region occur. In view of this, the author is inclined to propose that the central regulation of the endocrine changes in irradiation is brought about primarily by the hypothalamus. References 17. (5)

LEBEDINSKIY, A.V., prof.; MEDVEDEV, V.I. (Moskva)

Origin of spasm of the coronary vessels in experimental coronary
insufficiency [with summary in English]. Pat.fiziol. i eksp.terap.
1 no.6:9-15 M-D '57. (MIRA 11:3)

(CORONARY DISEASE, experimental,
origin of spasm (Rus))

LEBEDINSKIY, A. V.

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Consequences of radioactive strontium fallout [with summary in English].
Med.rad. 2 no.5:22-33 S-O '57. (MIRA 11:2)

(ATOMIC WARFARE,

fallout, inj. eff. of precipitation of radiostrontium (Rus))

(STRONTIUM, radioactive,

inj. eff. of precipitation after nuclear explosions (Rus))

LEBEDINSKIY, A.V.

Mikhail Nikolaevich Livanov; on his 50 the birthday. Fiziol.zhur.
43.no.12:1207-1208 D '57. (MIRA 11:3)

(LIVANOV, MIKHAIL NIKOLAEVICH, 1907-)

LEBEDINSKIY, A. V. (Prof.)

"Radioactive Fallouts and Their Consequences for Humanity."

report distributed at the International Seminar on Peaceful Uses of Atomic Energy and the Youth, Moscow, August 1958.

LEBEDINSKY, A. V.

"The Biological Effect of Small Doses of Ionizing Radiation", by A. V. Lebedinsky,
Y. G. Grigoryev, and G. G. Demirchoglyan.

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept 1958.

YEMEL'YANOV, V.S., otv.red.; BARDIN, I.P., red.; VINOGRADOV, A.P., red.;
 GOL'DANSKIY, V.I., red.; GULYAKIN, I.V., red.; DOLIN, P.I., red.;
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 MINTS, A.L., red.; MURIN, A.N., red.; NIZE, V.E., red.; NOVIKOV,
 I.I., red.; SEMENOV, V.F., red.; SOBOLEV, I.N., red.; BAKHAROVSKIY,
 G.Ya.; nauchnyy red.; BERKOVICH, D.M., nauchnyy red.; DANOVSKIY,
 N.F., nauchnyy red.; DELONE, N.N., nauchnyy red.; KON, M.A.,
 nauchnyy red.; KOPYLOV, V.N., nauchnyy red.; MANDEL'TSVAYG, Yu.B.;
 MILOVIDOV, B.M., nauchnyy red.; MOSTOVENKO, N.P., nauchnyy red.;
 MURINOV, P.A., nauchnyy red.; POLYAKOV, I.A., nauchnyy red.;
 PREOBRAZHENSKAYA, Z.P., nauchnyy red.; RABINOVICH, A.M., nauchnyy
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 SYSOYEV, P.V., nauchnyy red.; SHORIN, N.A., nauchnyy red.;
 SHREYBERG, G.L., nauchnyy red.; SHTEYNMAN, R.Ya., nauchnyy red.;
 KOSTI, S.D., tekhn.red.

[Concise atomic energy encyclopedia] Kratkaya entsiklopediya
 "Atomnaya energiya." [___Tables of isotopes (according to published
 data available at the beginning of 1958)] ___Tablitsa izotopov. (po
 dannym, opublikovannym k nachalu 1958. 12 p. Gos. nauch. izd-vo
 "Bol'shaya sovetskaya entsiklopediya," 1958. 610 p. (MIRA 12:1)

1. Sotrudniki Bol'shoy Sovetskoy Entsiklopedii (for Bakharovskiy,
 Berkovich, Danovskiy, Delone, Kon, Kopylov, Mandel'tsvayg, Milo-
 vidov, Mostovenko, Murinov, Polyakov, Preobrazhenskaya, Rabinovich,
 Simkin, Skvortsov, Sysoyev, Shorin, Shreyberg, Shteynman).
 (Atomic energy)

LEBEDINSKIY, A.V.

BAKULEV, A.N., akad., glavnyy red.; ANICHKOV, N.N., red.; BOLDYREV, T. Ye., red.;
BRUSILOVSKIY, L.Ya., prof., red.; BYKOV, K.M., red.; VASILENKO,
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[Great Medical Encyclopedia] Bol'shaia meditsinskaya entsiklopedia.
Izd. 2. Moskva, Gos. nauchnoe izd-vo "Bol'shaia sovetskaya
entsiklopedia." Vol. 7. [Gynatresia -burning. 1958. 1120 columns]
Ginatrezia-gorenie. [Phonograph record to accompany the article
"Golos"(voice of laryngectomees)] Grammofonnaia plastinka k stat'e
"Golos"(golos liaringektomirovannykh bol'nykh), [Three-dimensional
viewer] Ochki-avetofil'try. (MIRA 11:12)

(MEDICINE--DICTIONARIES)

BAKULEV, A.N., glavnyy red.; ANICHKOV, N.N., red.; BOLDYREV, T.Ye., red.;
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red.; GRASHCHENKOV, N.I., red.; DAVYDOVSKIY, I.V., red.;
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A.Y., red.; MALINOVSKIY, M.S., red.; MAN'KOVSKIY, B.N., red.;
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GRISHINA, L.A., tekhn. red.

[Great Medical Encyclopedia] Glav. red. A.N. Bakulev. Chleny red.
kollegii N.N. Anichkov i dr. Moskva, Gos. izd-vo med. lit-ry.
Vol.6. Vul'va - Ginantrop. Izd.2. 1958. 1184 columns. (MIRA 11:9)
(Medicine--Dictionaries)

BAKULEV, A.N., glav. red.; ANICHKOV, N.N., red.; BOLDYREV, T.Ye., red.;
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[Great medical encyclopaedia] Bol'shaia meditsinskaia entsiklopediia.
[Phonograph record to accompany the article on "Congenital heart
disease"] Grammofonnaia plastinka sodержit zapis' zvukovykh iavle-
nii k stat'e "Vrozhdennye poroki serdtsa." Glav. red. A.N.Bakulev.
Chleny red. Kollegii N.N. Anichkov i dr. Izd.2. Moskva, Gos. izd-vo
med. lit-ry. Vol.5. Vezikula - Vulkanizatsiia. 1958. 1248 columns.
(MEDICINE--DICTIONARIES) (MIRA 11:7)

LEBEDINSKIY, A.V., prof. (SSSR)

Somatic effects of ionizing radiations. Mir nauki no.4:18-21 ' 58.

(MIRA 12:3)

(RADIATION--PHYSIOLOGICAL EFFECT)

SOV/89-5-3-1115

AUTHORS: Lebedinskiy, A. V., Grigor'yev, Yu, G., Demirchoglyan, G. G.

TITLE: On the Biological Effect of Ionizing Radiation in Small Doses.I
(O biologicheskoy deystvii ioniziruyushchego izlucheniya v
malykh dozakh)

PERIODICAL: Atomnaya energiya, 1958, Vol. 5, Nr 3, pp. 310-316 (USSR)

ABSTRACT: This is a summarizing account concerning the following Soviet
papers: N. I. Nuzhdin, N. I. Shapiro et al.: Disturbance of the
sexual cycle in female mice after a daily irradiation of 0,1 r
for a period of 15 months. G. S. Strelin: With a dose of 2 r
a retardation of the mitosis of the epithelium of the cornea
of rats at times occurs. N. P. Smirnova (Laboratory A. V.
Lebedinskiy): Irradiation of 50 r causes a phase-modification
of irritability in the various centers of hypothalamic areas
during stimulation by an electric current. Yu. G. Grigor'yev:
The functional state of the human cerebral cortex during a thera-
peutical irradiation of the head and of the abdomen (electro-
encephalographical method). A. B. Tsypin: Recording of the bio-
logical activity of the brain of hares during irradiation with
a dosage of 0,13 to 0,03 r/sec (Method developed by M. H.

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SOV/89-3-3-15

On the Biological Effect of Ionizing Radiation in Small Doses. I

Livanov). A. I. Danilenko, N. D. Statsenko: Change of the frequency and amplitude of an electroencephalogram of a dog to which 0,1 to 1 mC/kg P^{32} is administered. I. K. Zyuzin: In the case of serious psychic diseases the cerebral cortex was found to become more sensitive already with respect to indicator doses of radioactive substances. Ye. S. London: The "light feeling" of the eyes as a result of the radiation of radioactive substances. Ts. M. Avakyan: The electroretinogram obtained after irradiation of the isolated eye of a frog with doses of 10 to 100 r. G. G. Demirchoglyan, G. T. Adams, Ts. M. Avakyan: The influence of P^{32} on the functional properties of the retina of the eye of a frog. A. V. Lebedinskiy, G. G. Demirchoglyan: The influence exercised by small doses of radioactive strontium preparations upon the functional state of the retina. There are 3 figures and 33 references, 22 of which are Soviet.

(Continued on abstract 12/15)

Card 2/2

SOV/89-5-3-12/15

AUTHORS: Lebedinskiy, A. V., Grigor'yev, Yu. G., Demirchoglyan, G. G.

TITLE: On the Biological Effect of Ionizing Radiation in Small Doses. II
(O biologicheskom deystvii ioniziruyushchego izlucheniya v
malykh dozakh)
(Continued from abstract 11/15)

PERIODICAL: Atomnaya energiya, 1958, Vol. 5, Nr 3, pp. 316-320 (USSR)

ABSTRACT: A. V. Lebedinskiy, A. I. Peymer: The dependence of the regenera-
tion and sensitivity of the retina on metabolic processes,
especially on the carbon-water metabolism. A. V. Lebedinskiy,
V. V. Yakovlev: Disturbed development of reflex-movement re-
actions (investigated in 300 embryos of rabbits). A. V.
Lebedinskiy, Den Chzhi-chen: Decisive change of the nervous
system of living beings that have been continuously fed with Sr^{90}
during embryogenesis. V. A. Muzheyev: The influence of radon
radiation upon the functional state of nerves and muscles. A. I.
Danilenko, N. D. Stetsenko: The nerve-cords undergo a modifica-
tion of functional properties under the effect of irradiation if
the radiation dose exceeds 17 erg/mm². N. Ye. Vvedenskiy: The
shortening of the duration of nerve reflexes as a result of
small doses. V. N. Strel'tsova: If 1 500 - 1 000 μC Cs^{137} or

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SOV/89-5-3-12/15

On the Biological Effect of Ionizing Radiation in Small Doses.11

Ru¹⁰⁶ is administered to rats only once, the effect causing swelling is the same as if 150 - 160 μ C/g were administered for a period of 100 days. N. A. Krayevskiy and N. N. Litvinov obtained a similar result. There are 1 figure and 10 references, 22 of which are Soviet.

Card 2/2

IEBRDINSKIY, A.V.

Modern concepts of the nature of changes in central elements of the
visual organ during dark adaptation of the eye. Probl.fiziol. opt.
12:5-12 '58 (MIRA 11:6)

(NIGHT VISION)

LEBEDINSKIY, A.V., red.; ALYAB'YEV, A.F., red.; MAZEL', Ye.M., tekhn.red.

[Soviet scientists on the danger of testing nuclear weapons]
Sovetskie uchenye ob opasnosti ispytaniy iadernogo oruzhiya.
Moskva, Izd-vo glav.upr.po ispol'zovaniyu atomnoi energ. pri
Sovete ministrov SSSR, 1959. 116 p. (MIRA 12:5)

1. Chlen-korrespondent AMN SSSR (for Lebedinskiy).
(Radioactive fallout) (Radioactivity--Physiological effect)

LEBEDINSKIY, A.V., red.; KRAYEVSKIY, N.A., red.; KROTKOV, F.G.,
red.; GRIGOR'YEV, Yu.G., red.; MARGULIS, U.Ya., red.;
PETROV, R.V., red.

[Collection of abstracts on radiation medicine for 1957]
Sbornik referatov po radiatsionnoi meditsine za 1957 god.
Moskva, Medgiz. Vol.1. 1959. 202 p. (MIRA 17:5)

LEBEDINSKIY, A. V.

"The Danger of Nuclear Weapons Tests."

Soviet Scientists Concerning the Dangers of Nuclear-Weapon Tests, p. 3,
Publishing House of the Main Administration for the Use of Atomic Power,
Council of Ministers USSR, Moscow, 1959.

LEBEDINSKIY, A.V.

"Modern Concepts of The Dark Adaptation Mechanism."

report submitted for the 21st International Congress of Physiological Sciences,
Buenos Aires, 9-15 Aug 1959.

LEBZDINSKIY, A.V.

21(3,4); 17(10)

1.2 PHASE I BOOK EXPLOITATION

SOV/3394

Neischerpayemyy (The Inexhaustible) Moscow, Atomizdat, 1959. 149 p.
Errata slip inserted. 10,000 copies printed.

Compiler: V. P. Parkhit'ko; General Ed.: A. K. Krasin, Doctor of Physical and
Mathematical Sciences, Professor; Ed.: N. M. Pchelintseva; Tech. Ed.: N. A.
Vlasova.

PURPOSE: This book is intended for the layman interested in the peaceful use of
atomic energy.

COVERAGE: This book contains several reports by leading Soviet scientists,
specializing in the peaceful uses of atomic energy, at the international
seminar on "Youth and Peaceful Use of Atomic Energy," held in August, 1958,
under the auspices of the Committee on Youth Organizations of the USSR.

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Physical Principles of Atomic Power Engineering (Professor A.K. Krasin)	22
Application of Isotopes and Atomic Radiations in Scientific Research and Industry (Professor P. L. Gruzin)	45
Application of Radioactive Isotopes in Biology and Medicine (Professor V. K. Modestov)	75
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AVAILABLE: Library of Congress

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Lebedinskiy, A. V.

21(4); 17(0)

PHASE I BOOK EXPLOITATION

SOV/2808

International Conference on the Peaceful Uses of Atomic Energy. 2d, Geneva, 1958

Doklady sovetskikh uchenykh; radiobiologiya i radiatsionnaya meditsina
(Reports of Soviet Scientists; Radiobiology and Radiation Medicine)
Moscow, Izd-vo Glav. upr. po ispol'zovaniyu atomnoy energii pri
Sovete Ministrov SSSR, 1959. 429 p. 8,000 copies printed. (Series:
Vtoraya Mezhdunarodnaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii.
Trudy, tom 5)

General Ed.: A.V. Lebedinskiy, Corresponding Member, USSR Academy of Medical
Sciences; Ed.: Z.S. Shirokova; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This book is intended for physicians, scientists, and engineers
as well as for professors and students at vtuzes where radiobiology and
radiation medicine are taught.

COVERAGE: This is Volume 5 of a 6-volume set of reports delivered by Soviet
scientists at the Second International Conference on the Peaceful Uses of
Atomic Energy, held on September 1-13, 1958, in Geneva. Volume 5 contains

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Reports of Soviet Scientists (Cont.)

SOV/2808

32 reports edited by Candidates of Medical Sciences S.V. Levinskiy and V.V. Sedov. The reports cover problems of the biological effects of ionizing radiation, future consequences of radiation in small doses, genetic effects of radiation, treatment of radiation sickness, uses of radioactive isotopes in medical and biological research, uses of atomic energy for diagnostic and therapeutic purposes, soil absorption of uranium fission products, their intake by plants, and their storage in plants and foodstuffs. References accompany each report.

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LEBEDINSKIY, A.V., red.; SEDOV, V.V., kand. med. nauk, red.; SEROVA, V.P., red.;
~~SHIROKOVA~~ SHIROKOVA, Z.S., red.; MAZEL', Ye.I., tekhn. red.

[Transactions. Selected reports by foreign scientists] Trudy. [Izbrannye doklady inostrannykh uchenykh] Moskva, Izd-vo Glav. uprav. po ispol'zovaniyu atomnoi energ. pri sovete Ministrov SSSR. Vol. 9. [Radiobiology and radiation medicine] Radiobiologiya i radiatsionnaya meditsina. Pod obshchei red. A.V. Lebedinskogo. 1959. 515 p. (MIRA 14:7)

1. Vtoraya mezhdunarodnaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Zheneva, 1958. 2. Chlen-korrespondent AMN SSSR (for Lebedinskiy)

(RADIOBIOLOGY)

(ATOMIC MEDICINE)

LEBEDINSKIY, A.V.

Jagadis Chandra Bose as biophysicist. Vop.1st.est.1 tekhn.
no.8:18-25 '59. (MIRA 13:5)

1. Chlen-korrespondent AMN SSSR.
(Bose, Jagadis Chandra, 1858-1937)

LEBEDINSKIY, A.V.; NAKHIL'NITSKAYA, Z.N.; SMIRNOVA, N.P.

Participation of the autonomic nervous system in the organism's
reaction to ionizing radiation. Med.rad. 4 no.7:3-9 J1 '59.
(MIRA 12:9)

(AUTONOMIC NERVOUS SYSTEM, physiol.)
(RADIATION EFFECTS)

21(3), 17(3)

AUTHOR: Lebedinskiy, A. V.

30V/89-6-2-11/28

TITLE: On the Biological Effect of Radiation (O biologicheskoy deystvii izlucheniya)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 2, pp 187 - 199 (USSR)

ABSTRACT: This paper gives a survey of various problems of radiobiology, wherein Western reports published at the 1958 Geneva Atomic Conference are referred to:

- 1) Biophysics and Biochemistry: Reference is made to the following Geneva Reports: 244, 859, 886, 901, 913, 920, 994, 1052, 1236, 1533, 1586, 1618, 1652, 1657, 1687, 2079, 2117, 2239, 2248, 2319, 2320, 2414.
- 2) Phenomena concerning the cell: Reference is made to the following Geneva Reports: 95, 111, 170, 137, 290, 588, 842, 884, 886, 893, 896, 897, 903, 907, 1391, 1654, 1695, 1844, 1846, 2074, 2281, 2476.
- 3) Phenomena concerning the whole organism: Reference is made to the following Geneva Reports: 469, 473, 479, 489, 891, 892, 992, 1053, 1278, 1289, 1405, 2068, 2132, 2237, 2315, 2480.
- 4) Toxic Products: Reference is made to the following Reports:

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On the Biological Effect of Radiation

SOV/89-6-2-11/28

61, 85, 96, 97, 99, 109, 110, 241, 292, 487, 490, 555, 859, 885, 888, 889, 890, 894, 897, 900, 903, 905, 909, 910, 911, 912, 1007, 1060, 1130, 1390, 1695, 1697, 1797, 1857, 2070, 2073, 2077, 2080, 2121, 2238, 2248, 2316.

5) Radiation effect on the developmental processes: The following Geneva Reports are referred to: 237, 292, 899, 902, 1344, 1684.

6) Chemical protection: The following Geneva Reports are referred to: 242, 556, 898, 915, 991, 993, 995, 996, 1289, 1655, 1686, 1694, 1798, 2113, 2121, 2248, 2320.

7) General theoretical conclusions: The following Geneva Reports are referred to: 108, 109, 218, 293, 308, 997, 1698, 1784, 1906, 2068, 2018, 2324.

Professor V. S. Balabukhe, N. N. Demin, M. P. Domshlak, N. A. Krayevskiy, Z. N. Nakil'nitskaya, S. I. Krauze assisted in the compilation.

SUBMITTED: November 13, 1958

Card 2/2

LEBEDINSKIY, A.V., prof.; MOSKALEV, Yu.I., doktor med.nauk

Some problems in modern radiobiology. Vest. AMN SSSR 14 no.9:3-16 '59.
(MIRA 13:1)

1. Chlen-korrespondent AMN SSSR (for Lebedinskiy)
(RADIATION EFFECTS)

LEBEDINSKY, A.V.

USSR

(INTL FEDERATION OF MEDICAL
ELECTRONICS.)

Tentative reports for the 1st Intl.
Conference on Medical Electronics,
London, England, 21-27 Jul 68.

GUSEV, V. G., Institute of Experimental
Biology and Medicine, Siberian Dept., Academy
of Sciences USSR, KALININ, V. D., Scientific
Research Testing Institute of Aviation
Mechanics, Moscow, and KURILE, N. L. - "Some
aspects of the problem of bioelectric control
of medical appliances" (Section B)
KOROTKOV, V. A., Prof., Institute of
Biology and Medicine, Academy of
Sciences USSR, Leningrad - "Modern methods
of analyzing records of electrocardiograms"
(Section A)

- KURATOV, A. G., Head, Biomedical Dept.,
Scientific Research Testing Institute of
Aviation Mechanic - "A survey" (Section B)
- LEBEDINSKY, A. V., Corresponding Member,
Academy of Medical Sciences USSR - "Physiological
applications of testopes" (Section C)
- MOSEVICH, V., Senior Research Institute of
Evolutionary Physiology, Academy of Sciences
USSR, Leningrad - "Physiological
adaptation of the body" (Section A)
- PAVLOV, V. V., Prof., Active Member, Academy of
Medical Sciences USSR - "Development of
ballistocardiographic techniques in the
USSR" (Section A)

PHASE I BOOK EXPLOTTATION

SOV/5578

Lebedinskiy, Andrey Vladimirovich, and Zinaida Nikolayevna Nakhil'nitskaya

Vliyaniye ioniziruyushchikh izlucheniye na nervnyuyu sistemu (Effects of Ionizing Radiation on the Nervous System) Moscow, Atomizdat, 1960. 186 p. 5,000 copies printed.

Ed.: A.I. Zavodchikova; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for radiobiologists, physiologists, and neurologists.

COVERAGE: The book discusses the effects of ionizing radiation on the nervous system. Nerve tissue sensibility, changes in the functional condition of the nervous system and its sensory perception mechanisms, and the reaction mechanism of the entire organism in response to radiation are discussed. The importance of conditioned reflexes and electrophysiological analysis in investigating the effects of radiation is pointed out. A brief resume is given of the work of Russian scientists in this field of research. No personalities are mentioned. There are 506 references: 369 Soviet, 93 English, 31 German, 8 French, 2 Japanese, 1 Czech, 1 Polish, 1 Italian.

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LEBEDINSKIY, A.V.
P. 2, 4

PHASE I BOOK EXPLOITATION

SOV/4117

Radiatsionnaya meditsina; posobiye dlya vrachey i studentov (Radiation Medicine; Textbook for Physicians and Students). Moscow, Atomizdat, 1960. 313 p.
6,000 copies printed.

Eds.: A.I. Burnazyan, Docent and A.V. Lebedinskiy, Professor; Tech. Ed.:
N.A. Vlasova.

PURPOSE: This textbook is intended for students in medical schools and physicians interested in the applications of radioactive elements in biology and medicine.

COVERAGE: This is a handbook on the applications of radioactive substances in the diagnosis and treatment of diseases, basic methods in the prevention of radiation disease, and existing methods of dosimetric control. Data used in the book is based on the results of experimental research in the field of radiation pathology, material from foreign sources containing data on the aftereffects of the atomic explosions in Japan, and on clinical studies of accidents at atomic installations in the USA. No personalities are mentioned. There are no references.

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Radiation Medicine; Textbook for Physicians and Students

SOV/4117

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AVAILABLE: Library of Congress

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JA/cdw/mas
9-2-60

LEBEDINSKIY, A-V

PHASE I BOOK EXPLOITATION

SOV/5435

Kiselev, P. N., Professor, G. A. Gusterin, and A. I. Strashinin, Eds.

Voprosy radiobiologii. t. III: Sbornik trudov, posvyashchenny 60-letiyu so dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology. v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor M[ikhail] N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad. Tsentr. n-issl. in-t med. radiologii M-va zdravookhrananiya SSSR, 1960. 422 p. 1,500 copies printed.

Tech. Ed.: P. S. Peleshuk.

PURPOSE: This collection of articles is intended for radiobiologists.

COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis, and therapy of radiation diseases. Individual articles describe investigations of the biological effects of radiation carried out by workers of the Central Scientific Research Institute for Medical Radiology of the Ministry of Public Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

Card 1/10

SOV/5435

Problems in Radiation Biology (Cont.)

topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

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Gusterin, G. A., and A. I. Strashinin. Professor Mikhail Nikolayevich Pobedinskiy (Commemorating his Sixtieth Birthday)

5

Lebedinskiy, A. V. [Member, Academy of Medical Sciences USSR],
N. I. Arlashchenko, and V. M. Mastryukova. On the Mechanism of Trophic
Disturbances Due to Ionizing Radiation

11

Zedgenidze, G. A., [Member, Academy of Medical Sciences USSR], Ye. A.
Zherbin, K. V. Ivanov, and P. R. Vaynshteyn. Hormonal Activity of the
Adrenal Cortex in Acute Radiation Sickness and the Effect of Desoxy-
corticosterone Acetate on the Disease

17

Card 2/10

LEBEDINSKIY, A.V.

Effect of ionizing radiations on the autonomic nervous system.
Med.rad. 5 no.7:79-84 '60. (MIRA 13:12)
(NERVOUS SYSTEM, AUTONOMIC)

LEBEDINSKIY, A.V.; YAKOVLEV, V.V.

Changes in the functional state of the hypophysis under the influence
of ionizing radiations. Med.rad. 5 no.10:21-25 '60. (MIRA 14:2)
(PITUITARY BODY)
(RADIATION—PHYSIOLOGICAL EFFECT)

LEBEDINSKIY, A.V.; KLIMOVSKAYA, L.D.; NAKHIL'NITSKAYA, Z.N.;
SEDOV, V.V.; SMIRNOVA, N.P.

Effect of Y^{90} on the nervous system in connection with the
possibility of its use in experiments and in neurosurgical practice.
Vop. neirokhir 24 no. 2:9-12 Mr-Sp '60. (MIRA 14:1)
(YTTRIUM--ISOTOPES) (BRAIN)

LEBEDINSKIY, A.V.; BEKHTEREVA, N.P.

Summation of the inhibition process. Fiziol. zhur. 46 no. 5:509-
515 My '60. (MIRA 13:12)

1. From Polenov Research Neurosurgical Institute, Leningrad.
(INHIBITION)

LEBEDINSKIY, A.V.; MOSKALEV, Yu.I. (Moskva)

Some problems in modern radiobiology. Usp. sovr. biol. 49 no.3:320-
337 My-Je '60. (MIRA 13:7)

(RADIOBIOLOGY)

LEBEDINSKIY, A.V., prof., zasl. deyat. nauki, red.; MOSKALEV, Yu.I., doktor med. nauk, red.; SMOLYAN, G.L., red.; MAZEL', Ye.I., tekhn. red.

[Biological effect of radiation and problems in the distribution of radioactive isotopes] Biologicheskoe deistvie radiatsii i voprosy raspredelenia radioaktivnykh izotopov. Moskva, Gos.izd-vo lit-ry v oblasti atomnoi nauki i tekhniki, 1961. 190 p. (MIRA 14:6)

1. Deystvitel'nyy chlen AMN SSSR (for Lebedinskiy)
(RADIOBIOLOGY)

ZARETSKAYA, Yuliya Mikhaylovna; LEBEDINSKIY, A.V., prof., red.; BARANOVA, Ye.F., red.; BEL'CHIKOVA, Yu.S., tekhn. red.

[Lymphoid organs in radiation pathology] Limfoidnye organy v luchevoi patologii. Pod red. A.V. Lebedinskogo. Moskva, Medgiz, 1961. 114 p. (MIRA 15:3)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Lebedinskiy).
(RADIATION SICKNESS) (LIMPHOID TISSUE)

LEBEDINSKIY, A.V., zasl. deyatel' nauki, prof., red.; MOSKALEVA,
~~Yu.I.~~, doktor med. nauk, red.; LANDAU-TYLIKINA, S.P., red.;
LYUDKOVSKAYA, N.I., tekhn. red.

[Distribution, biological activity and migration of radio-
active isotopes] Raspredelenie, biologicheskoe deistvie i
migratsiia radioaktivnykh izotopov. Moskva, Medgiz, 1961.
342 p. (MIRA 15:2)

1. Deystvitel'nyy chlen Akademii meditsinskiykh nauk SSSR (for
Lebedinskiy).

(RADIOISOTOPES--PHYSIOLOGICAL EFFECT)

ORBELI, Leon Abgarovich [deceased]; VOYNO-YASENETSKIY, A.V., red. toma;
VOSKRESENSKAYA, A.K., red. toma; KOSHTOYANTS, Kh.S., red. [deceased];
ASRATYAN, E.A., red.; KREPS, Ye.M., red.; GINETSIINSKIY, A.G., red.;
LEBEDINSKIY, A.V., red.; TONKIKH, A.V., prof., red.; GOL'DANSKAYA,
M.I., red. izd-va; SMIRNOVA, A.V., tekhn. red.

[Selected works in five volumes] Izbrannye trudy v piati tomakh.
Moskva, Izd-vo Akad. nauk SSSR. Vol.1. [Problems of evolutionary
physiology] Voprosy evoliutsionnoi fiziologii. 1961. 455 p.
(MIRA 14:9)

1. Chleny-korrespondenty AN SSSR (for Koshtoyants, Asratyan, Kreps).
2. Chleny-korrespondenty Akademii meditsinskikh nauk SSSR (for Ginet-sinskiy, Lebedinskiy).

(PHYSIOLOGY)

32745

S/205/61/001/006/005/022
D268/D305

27.2400

also 2209

AUTHORS:

Buldakov, L.A., Lebedinskiy, A.V., and Petrova, A.S.

TITLE:

On the role of toxic factors in the pathogenesis of radiation sickness

PERIODICAL: Radiobiologiya, v. 1, no. 6, 1961, 851 - 855

TEXT: In 6 dogs, weight 10 ± 0.76 kg, the thoracic duct was exposed in the neck under narcosis and a glass or chlorovinyl canule inserted to drain off all lymph entering the duct. Immediately after the operation the area was irradiated with X-rays at a dose of 1,200 r using an -3 apparatus (RUM-3 mass X-ray unit 3) with a dose rate of 66 r/min. After irradiation 20 ml. of an isotonic sodium chloride solution was given intravenously to increase the lymph drainage, which was continued for 1 - 2 days. Peripheral blood composition was studied for 60 days before and at different times after irradiation. At the time of the experiment the general condition of 5 of the dogs was good and their appetites satisfactory. Rectal temperature was $38.5 - 39.5^{\circ}\text{C}$. On the seventh day body

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On the role of toxic factors in ...

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D268/D305

weight fell on an average from 10 to 8.5 kg, beginning to recover from the 12th day. The peripheral blood picture changed very little. For the first twenty-four hours by the sixth hour after irradiation mild neutrophilic leukocytosis developed from 8.21 to 20.5 thousand/mm³ blood, while in the leukocytic fraction the number of neutrophils increased with 12.8 - 13.1 thousand mature and 5.17 thousand young forms per mm³. From the third day after irradiation the total number of leukocytes in the blood was nearly back to the initial number. During the 3rd - 7th day there was a very slow recovery in the quantity of eosinophils and lymphocytes, the original number being attained from the 25th day. In the early period after irradiation eosinophils were reduced by 0 - 0.4 % and lymphocytes by 2.6 %. Changes in the white blood cell picture, therefore, observed in the irradiated dogs after the insertion of the fistula, differ considerably from those characteristic for radiation sickness, the typical leukopenia being absent. There was scarcely any change in the red blood cells, the erythrocyte content being 5 - 6 million/mm³. By the 6th hour in most of the dogs erythrocytes increased from 5.6 to 6.6 million without any increase in hemoglobin.

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S/205/61/001/006/005/022
D268/D305

On the role of toxic factors in ...

From the 7th - 15th day of the experiment in 3 of the dogs reticulo-
cytes had increased 1.4 - 4.4 %, gradually returning to normal. The
increase began at the time when blood was noted in the feces. The
experiments showed that when a large quantity of lymph was removed
from the organism, there were no signs of severe radiation sickness
in dogs at and 24 hours after irradiation, though exposure to a
dose of 1,200 r in normal conditions causes it, usually with sub-
sequent death. In these experiments only 1 dog died. Hemorrhage
was observed in the intestine only which was not directly irradi-
ated. The fact that hemorrhage can be prevented by removal of tissue
fluid and lymph from the irradiated organ is an indication that
toxic products produced in the organ play a major role in the ori-
gin of hemorrhage. There are 1 table and 25 references: 23 Soviet-
bloc and 2 non-Soviet-bloc. The references to the English-language
publications read as follows: F.P. Ellinger, D.B. Poswit and S.
Glasser, Amer. J. Rentgenol., 6, 102, 1949; L.O. Jacobson, E. Marks
and E. Lorenz, Radiology, 52, 3, 371, 1949. X

SUBMITTED: May 19, 1961

Card 3/3

LEBEDINSKIY, A.V., prof.

Biophysics, biology, medicine. Zdorov'ye 7 no.7:1-3 J1 '61.
(MIRA 14:6)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR.
(BIOPHYSICS) (BIOLOGY) (MEDICINE)

LEBEDINSKIY, A.V. /

Scientific good fortune. Nauka i zhizn' 28 no.4:5 Ap '61. (MIRA 14:5)

1. Chlen-korrespondent AMN SSSR.
(Aeronautics)

LEBEDINSKIY, A.V., prof. (Moskva)

Pathogenesis of acute disorders of coronary circulation;
clinical and physiological parallels. Klin.med. 39 no.5:
52-55 Mr '61. (MIRA 14:5)

1. Deystvitel'nyy chlen AMN SSSR.
(CORONARY HEART DISEASES)

LEBEDINSKIY, A.V., zasl. deyatel' nauki, prof., red.; MOSKALEV, Yu.I.,
doktor med. nauk, red.; LANDAU-TYLKINA, S.P., red.; KUZ'MINA, N.S.,
tekhn. red.

[Plutonium-239; its distribution, biological action, and the
acceleration of its excretion] Plutonii-239; raspredelenie, bio-
logicheskoe deistvie, uskorenie vyvedeniia. Moskva, Medgiz,
1962. 167 p. (MIRA 15:6)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Lebedinskiy).

(PLUTONIUM)

DURMISH'YAN, M.G., prof., red.[deceased]; ~~LEBEDINSKIY, A.V., prof.,~~
red.; AZHIPA, Ya.I., red.; BEL'CHIKOVA, Yu.S., tekhn. red.

[Body reactions to the action of small doses of ionizing
radiations] Reaktsii organizma na deistvie malykh doz ioni-
ziruiushchei radiatsii. Moskva, Medgiz, 1962. 302 p.
(MIRA 15:11)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR
(for Lebedinskiy).
(RADIATION--PHYSIOLOGICAL EFFECT)

SISAKYAN, N.M., akademik, glav. red.; CHERNIGOVSKIY, V.N., akademik,
red.; PARIN, V.V., red.; LEBEDINSKIY, A.V., red.;
YAZDOVSKIY, V.I., doktor med. nauk, prof., red.; GAZENKO,
O.G., doktor biol. nauk, red.; GONCHAROVA, L.S., red. izd-
va; POLYAKOVA, T.P., tekhn. red.

[Problems of space biology] Problemy kosmicheskoi biologii.
Pod red. N.M.Sisakiana. Moskva, Izd-vo Akad. nauk SSSR.
Vol.1. 1962. 461 p. (MIRA 15:10)

1. Akademiya nauk SSSR. Otdeleniye biologicheskikh nauk.
2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR
(for Parin, Lebedinskiy).

(SPACE BIOLOGY)

LEBEDINSKIY, A.V.; NEFEDOV, Yu.G.

Problems of radiation protection in space flights. Probl.kosm.
biol. 2:11-24 '62. (MIRA 16:4)
(SPACE FLIGHT--SHIELDING (RADIATION))

ACCESSION NR AM4024708

BOOK EXPLOITATION

S/

Burnazyan, A. I.; Lebedinskiy, A. V., eds.

Radiation medicine; textbook for physicians and students (Radiatsionnaya meditsina; posobiye dlya vrachey i studentov), 3d ed., rev. and enl., Moscow, Gosatomisdat, 371 p. illus., biblio. Errata slip inserted. 7,800 copies printed.

TOPIC TAGS: radiation medicine, infection, immunity, toxicology, pathological physiology, radiation damage, skin radiation damage, radiation illness treatment

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Ch. IV. Toxicology of radioactive substances (D. I. Zakutinskiy) -- 258

Ch. V. Pathological anatomy of radiation damage (N. A. Krayevskiy) -- 287

Ch. VI. Chemical protection of organisms from ionizing radiation (Ye. P. Romantsev) -- 314

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ACCESSION NR AM1024708

Ch. VII. Clinic and treatment of radiation illness (N. A. Kurshakov and I. S. Glazunov) -- 326

Ch. VIII. Acute radiation damage to the skin (V. N. Petushkov) -- 360

SUB CODE: LS.

SUBMITTED: 12Sep63

NR REF SOV: 127

OTHER: 039

DATE ACQ: 16Apr64

Card 2/2

ARLASHCHENKO, N.I.; LEBEDINSKIY, A.V., nauchnyy rukovoditel'

Importance of the peripheral innervation apparatus in the development of changes in the permeability of the vascular barrier after the action of ionizing radiations. Biul. eksp. biol. i med. 54 no.8: 22-25 Ag '62. (MIRA 17:11)

1. Deystvitel'nyy chlen AMN SSSR (for Lebedinskiy).

TSYPIN, A.B.; LEBEDINSKIY, A.V., prof., rukovoditel' raboty

Some direct reactions of the nervous system to the action of
ionizing irradiation. Biul. eksp. biol. i med. 56 no.9:34-37
S '63. (MIRA 17:10)

1. Predstavlena deystvitel'nyy chlenom AMN SSSR A.V. Lebedinskim.

ACCESSION NR: AT4042699

S/0000/63/000/000/0333/0339

AUTHOR: Lebedinskiy, A. V.; Arlashchenko, N. I.; Bokhov, B. B.; Grigor'yev, Yu. G.; Kvasnikova, L. N.; Farber, Yu. V.

TITLE: The importance of the vestibular analyzer in the selection and training of cosmonauts

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 333-339

TOPIC TAGS: rotating chamber, tilt table, rotation effect, man, Coriolis acceleration

ABSTRACT: One of the main criteria upon which the system of cosmonaut selection should be based is the evaluation of the vestibular analyzer. The evaluation of other systems (i. e., the visual analyzer, the retina and muscles of the eye, and interoceptors) which enable a cosmonaut to orient himself in space should be of almost equal importance in the selection program. Experience has shown that a

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ACCESSION NR: AT4042699

disruption of information concerning the position or the movement of the body can lead to vegetative disorders. This consideration led to studies of the analyzer systems of each of the cosmonauts, the interaction between analyzer systems, and the condition of vegetative functions during unusual interaction between analyzers (such as the conditions which arise during space flight). The special conditions arising during space flight are limitation of afferentation in a weightless state and the presence of unusual stimulation (vibration, noise, etc.). The differentiated study of the vestibular analyzer should include determination of the threshold sensitivity of the semicircular canals to an adequate stimulus, determination of a reactivity curve during application of angular accelerations of various magnitudes, determination of adaptive abilities to the action of angular acceleration, and tests with Coriolis acceleration. The research on threshold sensitivity of the semicircular canals to adequate stimuli was performed for both positive and negative acceleration. Research performed on fifty healthy persons indicated that the scope of variation of threshold sensitivity is not great. It varies from 0.1 to 0.5° per sec² (20 second action of acceleration) for positive accelerations, and 1.5 to 5° per second (for a stop stimulus of 0.15 seconds) for negative accelerations. However, various outside stimuli and physical conditions of the environment can greatly affect the thresholds of vestibular sensitivity. The data

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ACCESSION NR: AT4042699

obtained indicate that the study of vestibular thresholds will be very helpful in the early detection of hidden disturbances in the activity of the analyzer which cannot be detected easily by other means. The most common forms of investigating the functions of the semicircular canals are various rotational tests. Current trends indicate that testing in the near future will be based on methods of minimal stimulation and successive rotations of increasing intensity. Evaluation will have to be based on methods which lend themselves to quantitative analysis. Numerous experiments have shown that training consisting of the systematic stimulation of the vestibular mechanism with the aid of various exercises in rotational tests increases the vestibular stability of the subjects. The speed with which adaptation takes place varies with each individual. This results in the problem of developing a test for the objective evaluation of the degree of adaptation. Tests based on registration of nystagmus are inadequate because they fail to take into account the vegetative complex. Apparently, the real picture of adaptive qualities of the vestibular analyzer can only be obtained from a summary evaluation involving vestibular-vegetative, vestibular-somatic, and sensory reactions arising in response to repeated stimulations. Laboratory studies are currently being conducted in this area. The use of Coriolis accelerations as a test has as its purpose the study of the summary reaction which arises in labyrinth recept-

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ACCESSION NR: AT4042699

ors in response to stimulation obtained during the combined action of angular and linear accelerations. Laboratory tests with the periodic application of Coriolis accelerations accompanied by slow rotation have indicated that even a short rotation leads to a disruption of walking, to a change in skin temperature, and to a change in the pulse frequency. At the same time, a lowering of the threshold of sensitivity to Coriolis accelerations was noted without the threshold to angular acceleration being affected. A very interesting interrelationship exists between the vestibular and optical analyzers. Laboratory experiments have confirmed that stimulation of the retina has an inhibiting effect on the vestibular analyzer. Tests have indicated that the result of interaction between the optical and the vestibular stimuli is determined by the functional condition of the vestibular analyzer. It became apparent that if the excitability of the vestibular analyzer was increased by radioactivity, inhibition of spontaneously arising nystagmus by optical stimulation of the retina became more distinct. The level of excitability of the vestibular analyzer was achieved by means of radioactive tars.

ASSOCIATION: none

Card

4/5

ACCESSION NR: AT4042699

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

ACCESSION NR: AT4042700

S/0000/63/000/000/0339/0343

AUTHOR: Lebedinskiy, A. V.; Arlashchenko, N. I.; Busygin, V. Ye.; Vartbaronov, R. A.; Veselov, A. S.; Volokhova, N. A.; Grigor'yev, Yu. G.; Yemel'yanov, M. D.; Kalyayeva, T. V.; Krylov, Yu. V.; Polyakov, B. I.; Farber, Yu. V.

TITLE: Effects of Coriolis accelerations on the human organism

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 339-343

TOPIC TAGS: vestibular analyzer, cosmonaut selection, cosmonaut training, semi-circular canal, acceleration, rotation, nystagmus, optical analyzer, Coriolis acceleration

ABSTRACT: Studies of the effect of prolonged Coriolis accelerations on the human organism must be made as a preliminary step toward the creation of artificial gravity in spaceships. Studies were performed in a slowly rotating MBK-1 chamber (a cylindrically shaped room 2.1 m in diameter and 2.3 m high, equipped with two armchairs). In the first series of experiments, 13 healthy persons were subjected

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ACCESSION NR: AT4042700

to prolonged rotation of 1 to 5 hours at an angular velocity of $5.3^{\circ}/\text{sec}$. In the second series of experiments, 4 subjects were rotated for 24 hours at angular velocities of 5.3, 10.6, and 21.2^o/sec. Coriolis accelerations were created periodically by tilting the body and head in a plane perpendicular to the plane of rotation of the chamber at the rate of 1 movement/sec. Prolonged stay of subjects with normal vestibular sensitivity under conditions of rotation at 5.3, 10.6, and 21.2^o/sec resulted in functional changes in the condition of the central nervous system and the cardiovascular system, and in disruption of the body temperature control and the balancing function. The degree of vegetative disorders was found to be directly proportional to the speed of rotation and the degree of vestibular sensitivity of the subjects. During cumulative action of Coriolis accelerations, the majority of the subjects developed an adaptation which was noted from 1 to 5 hours after beginning of the rotation. On the basis of the results obtained, the method of prolonged slow rotation is recommended for training purposes.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: 13

NO REF SOV: 000

OTHER: 000

Card 2/2

LEBEDINSKIY, A.V., prof.; NEFEDOV, Yu.G.

Space flights and ionizing radiation. Priroda 52 no.7:19-24
Jl '63. (MIRA 16:8)

(Radiation--Dosage)

}

KRAYEVSKIY, N.A., red.; LEBEDINSKIY, A.V., red.; SMOLYAN, G.L., red.

[Restorative processes in radiation lesions; collection of articles] Vosstanovitel'nye protsessy pri radiatsionnykh porazheniyakh; sbornik statei. Moskva, Atomizdat, 1964. 243 p.
(MIRA 17:5)

1. Deystvitel'nyye chleny AMN SSSR (for Krayevskiy, Lebedinskiy).

ANOKHIN, P.K., red.; KOSTYUK, P.G., red.; KRYZHANOVSKIY, G.N., red.;
LEBEDINSKIY, A.V., red.; MENITSKIY, D.N., red.; MUZYKANTOV,
V.A., red.; PARIN, V.V., red.; ROYTBAK, A.I., red.; KULLANDA,
K.M., red.

[Contemporary problems of electrophysiological studies of
the nervous system] Sovremennye problemy elektrofiziologi-
cheskikh issledovaniy nervnoi sistemy. Moskva, Meditsina,
1964. 519 p. (MIRA 17:7)

1. Akademiya meditsinskikh nauk SSSR, Moscow.

LEBEDINSKIY, A. V.; LEVINSKIY, S. V.; NEFEDOV, Yu. G.

"The general principles in reaction of the organism on the complex environmental factors acting in the cabins of cosmic vehicles."

report submitted for 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

ACCESSION NR: AT4037698

S/2865/64/003/000/0278/0288

AUTHOR: Lebedinskiy, A.V.; Grigor'yev, Yu. G.; Lyubimova-Gerasimov, R. M.; Polyakov, B. I.

TITLE: Vegetative reactions during stimulation of the vestibular analyzer and their possible role in complicating space flight conditions

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy* kosmicheskoy biologii, v. 3, 1964, 278-288

TOPIC TAGS: acceleration, vestibular analyzer, space flight, Coriolis acceleration, rabbit, vegetative reflex

ABSTRACT: The role of angular accelerations and Coriolis accelerations on the vestibular function was studied by means of a BY-2 type accelerator, on which it was possible to produce angular accelerations ranging from 0.05 up to $1200^{\circ}/\text{sec}^2$ and any magnitude of angular velocity up to $180^{\circ}/\text{sec}$. Vegetative reactions are of special interest since by stimulating the vestibular apparatus, it is possible to observe practically all known vegetative reactions. It has been established that the magnitude of the reaction depends on the duration of the stimulus (acceleration). Data obtained indicate that after whole-body irradiation of the animal,

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ACCESSION NR: AT4037698

more time is required for acceleration to produce an equal reaction. There is reason to believe, in this case, that radiation affects the central nervous system and not the receptor. So far there have been practically no attempts made to evaluate the biological significance of vegetative reflexes which arise during stimulation of the vestibular analyzer. When rabbits were subjected to rocking in the horizontal (duration of acceleration, 0.15 sec), at $66^\circ/\text{sec}^2$, a diminution of respiration amplitude was noted; at $400^\circ/\text{sec}^2$ the diminished amplitude increased in frequency; at $600^\circ/\text{sec}^2$ the amplitude dropped off sharply with no marked frequency increase; and at $1200^\circ/\text{sec}^2$ there was a distinct break in respiration. Reactions of the cardiovascular system to acceleration are complex. Thus, when rabbits are subjected to an acceleration of $0.05^\circ/\text{sec}^2$ for 30 sec, skin temperature rises. But, if accelerations are increased to 1.5 or to $3.2^\circ/\text{sec}^2$ for the same duration of time, skin temperature drops. The depressive reaction appears, apparently, only in response to large accelerations because when rabbits were accelerated in the range from 60 to $800^\circ/\text{sec}^2$ (duration, 0.15 sec), no depressive reaction was observed. When rabbits were exposed to short-term acceleration of $5^\circ/\text{sec}^2$, a diminution of blood circulation in the brain was observed. This effect was distinct if the acceleration lasted 12 or 24 seconds, but indistinct if the duration was only 6 seconds. The authors have stressed the importance of.

Card d 2/3

ACCESSION NR: AT4037698

duration of effect of acceleration on appearance of vestibular reactions. Very possibly this indicates the significant role of inclusion of the endocrine mechanism, particularly of the adrenal system, into the complex of vegetative reactions, and the consequent stimulation of the reticular formation. If the appearance of vegetative reflexes observed during stimulation of the vestibular mechanism is tied to the stimulation of the reticular formation, then, in the final analysis, their involvement must be controlled by the cortex of the cerebral hemispheres. It was also noted that stimulation of the vestibular apparatus limits the activity of the cortical component of vegetative reactions.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PH, LS

NO REF SOV: 010

OTHER: 004

Card 3/3

LEBEDINSKIY, A.V.; MASTRYUKOVA, V.M.; NAKHIL'NITSKAYA, Z.N.; STREZHIZHOVSKIY, A.D.

Effect of ionizing radiation on the state of regenerative processes
in the organism. Radiobiologiya 4 no.5:693-700 '64.
(MIRA 18:4)

L 20227-65 LEO-2/FSF(h)/FSS-2/EWG(r)/EWT(1)/FS(v)-3/EEC(k)-2/EWG(v)/EWA(d)/
EWG(a)/EWG(c)/EWG(j) Pb-4/Po-4/Pe-5/Pq-4/Pac-4/Pae-2/Pi-4 BSD/ASD(a)-5/AFWL/
AMD/AFETR/AFTC(b) TT/DD/GW

ACCESSION NR: AP4049501

S/0209/64/000/011/0024/0031

AUTHOR: Lebedinskiy, A. V.; Levinskiy, S. V.; Nefedov, Yu. G.

TITLE: In anticipation of new space flights; a unique experiment of Soviet scientists

SOURCE: Aviatsiya i kosmonavtika, no. 11, 1964, 24-31

TOPIC TAGS: prolonged isolation, cosmonaut training, ionizing radiation, temperature, noise level, carbon dioxide concentration, adaptation

ABSTRACT: This article deals with the problem of studying the reaction of the human organism to a prolonged stay in an hermetically-sealed chamber. Results will make possible the setting up of further experiments using different environments. These experiments, which varied from 10 to 120 24-hour periods in length, studied the effects of this isolation on the vital functions of 10 human beings. Other conditions, including small doses of ionizing radiation and periodic increases in temperature and noise-level, were simulated. Not only did the varying environments influence the human subjects, but the human organism was found to influence the environment. A considerable increase in the number of bacteria in the air of the chamber and on the skin of the subjects was noted. There was also a marked increase in carbonyl hemoglobin in the blood, and CO₂ in the air of the chamber.

L 20727-65

ACCESSION NR: AP4049501

chamber, the latter varying from 10 to 20 times the normal atmospheric content. This caused subjects to experience difficulty in breathing and to demonstrate symptoms of auto-intoxication. During the initial 10 or 15 24-hour periods, major adjustments to the new environment were made. Systole decreased and reaction time delay increased, light sensitivity was lowered and the error factor went up. Nevertheless, adjustment was eventually made, light sensitivity returned, and the number of errors decreased. Fatigue remained constant and heart action was found to be at a sub-normal level. The article also deals with irritability, nervousness, and other non-physical reactions. The influence of the individual on the environment is stressed, with such influences differing from individual to individual. Orig. art. has: 4 graphs.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PH

NO REF SOV: 000

OTHER: 000

Card 2/2

MASTRYUKOVA, V.M.; STRZEMZHOVSKIY, A.D.; LEBEDINSKIY, A.V., nauchnyy
rukovoditel' raboty, prof.

Effect of ionizing radiation on the 24-hour mitotic rhythm of
the corneal epithelium in mice. Biul.eksp.biol.i med. 58
no.7:106-109 J1 '64. (MIRA 18:2)

1. Deystvitel'nyy chlen AMN SSSR (for Lebedinskiy). Submitted
July 22, 1963.

BLOKHIN, N.N.; VASIL'YEV, P.V., kand. biol. nauk; LEBEDINSKIY, A.V., prof. [deceased]; YAZDOVSKIY, V.I., doktor med. nauk, prof.; CHERNOV, A.G.; NIKOLAYEV, V.R., red.

[Man in a space ship. Eighth discussion. Participants in the discussion: N.N.Blokhin and others] Chelovek v kosmicheskoy korabli. Beseda vos'maya. V besede uchastvuyut: N.N.Blokhin i dr. Moskva, Znanie, 1965. 30 p. (Novoe v zhizni, nauke, tekhnike. VIII seriia: Biologiya i meditsina, no.7) (MIRA 18:4)

1. Deystvitel'nyy chlen, prezident AMN SSSR (for Blokhin).
2. Deystvitel'nyy chlen AMN SSSR (for Lebedinskiy).

L 31342-65 EWT(m) DIAAP

ACCESSION NR: AP5005523

S/G205/65/005/001/0072/0076

AUTHOR: Lebedinskiy, A. V. (Deceased); Nefedov, Yu. G.; Domshlek, M. P.; Ryzhov, N. I.; Dafenskaya, N. G.; Bibikova, A. F.; Ganshina, A. N.; Lebedev, B. I.

TITLE: The biological effects of fractional irradiation by 510-Mev protons on dogs

SOURCE: Radiobiologiya, v. 5, no. 1, 1965, 72-76

TOPIC TAGS: high energy proton, biological effect, dog

ABSTRACT: Little data has been published on the effect of high-energy protons on larger animals. It is theorized by the authors that the biological effectiveness of protons on larger animals would be more pronounced than on small animals. To test this theory, the authors investigated 12 dogs divided into two groups (6 dogs each) according to conditions of irradiation; the first group was irradiated 19 times over a period of 40 days with a total dose of 650 r. The second group was irradiated 8 times over a period of 15 days with a total dose of 690 r. The radiation doses in the first group ranged from 10 to 79 r and in the second group from 71 to 109 r. The experiments were conducted at the Joint Institute of Nuclear Research on the IYaP synchrocyclotron. The unit was arranged so that a 510-Mev proton beam hit a section 40 cm in diameter at 1 rad/sec. It was found that both

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L 31342-65

ACCESSION NR: AP5005523

groups exhibited functional and morphological symptoms of severe radiation sickness, typical of this type of radiation. In comparison with clinical data on the effects of x-rays, protons generally had the same effects. However, dogs irradiated with protons exhibited some symptoms peculiar to this radiation; the hemorrhagic syndrome was more pronounced, and, when death took place, there was a relatively higher leukocyte content in the peripheral blood and generally lower bone-marrow blood formation in the form of a somewhat greater depth of damage to cells of the erythroblastic system. An examination of the structures of the central nervous system revealed damage to neural and glial structures and disruption of blood and fluid circulation. Orig. art. has: 5 figures. [CD]

ASSOCIATION: none

SUBMITTED: 19Feb63

ENCL: 00

SUB CODE: LS

NO REF SOV: 003

OTHER: 007

ATD PRESS: 3201

Card 2/2

L 46179-65 EWG(j)/EWG(r)/EWT(1)/FS(v)-3/EWG(v)/EWG(x)-2/EWG(c) Ph-4/Ps-5
 ACCESSION NR: AP5011558 DD UR/0219/65/059/004/0012/0014

37
36
8

AUTHOR: Bokhov, B. B.; Shipov, A. A.; Lebedinskiy, A. V.

TITLE: Some quantitative characteristics of the vestibular analyzer in rabbits

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 59, no. 4, 1965, 12-14

TOPIC TAGS: vestibular apparatus, nystagmus, semicircular canal, labyrinth

ABSTRACT: The nystagmic reaction of chinchilla rabbits to rotation was investigated with respect to duration and number of oscillations after change in intensity of adequate stimulation of the vestibular analyzer (sudden stop) ranging from 110°/sec to 180°/sec. Since the experimental curves constructed on a semilogarithmic scale were not rectilinear, they could not express a logarithmic function. Mathematical analysis showed that the portion of the curve reflecting the duration of nystagmus in the 10-60°/sec range of stimuli was the closest approximation of a logarithmic function. The curve showing the number of nystagmic oscillations in the same range approximated both linear and logarithmic functions. A linear approximation of the two curves was possible in the 70-180°/sec range. A change in the nature of the curves occurred in the 60-70° range. A stimulus of about 70°/sec is equivalent to

Card 1/2

L 45179-65
ACCESSION NR: AP5011558

The activity of semicircular canal cristae at rest. After sudden halting of steady rotation, the responses of the cristae of both semicircular canals are stimulated, and in the labyrinth with ampullopetal flow of endolymph the rate of impulses from the cristae receptors is greater than when at rest, but less in the labyrinth with ampullofugal flow. When the cupola returns to the equilibrium position, the velocity of impulses from the semicircular canal cristae with ampullopetal flow of endolymph gradually decreases to that at rest, but it increases in the opposite canal. The time required for the establishment of equilibrium impulses seemed to be determined by the duration of the nystagmic reaction. Stimuli of about 70°/sec or more block impulses from the receptors of the semicircular canal cristae with the ampullofugal flow of endolymph, thereby slightly prolonging the nystagmic reaction beyond the time determined by the logarithmic relationship. Orig. art. has 2 figures.

ASSOCIATION: Institut biofiziki, Ministerstva zdravookhraneniya SSSR, Moscow
(Institute of Biophysics, Ministry of Health SSSR)

SUBMITTED: 3Ma464

ENCL: 00

SUB CODE: LS

NO REF SOV: 007

OTHER: 010

ml
Card 2/2

L 11275-07 ETR(1)/ 50TH 10/00

ACC NR: AT6029633

SOURCE CODE: UR/0000/66/000/000/0242/0201

AUTHOR: Lebedinskiy, A. V. (deceased); Nefedov, Yu. G.; Donschik, K. P.; Krasovskiy, N. N.; Moskalov, Yu. I.; Ryzhov, N. I.; Dareninskaya, N. G.; Bibikova, A. F.; Ganchina, A. N.; Lebedev, B. I.; L'vitsyna, G. M.; Shashkov, I. F.; Lerbeneva, N. I.; Gerashkova, G. K.

ORG: none

TITLE: Model investigations of cosmic radiation biologic effect

SOURCE: Voprosy obshchey radiobiologii (Problems of general radiobiology). Moscow, Atomizdat, 1966, 242-254

TOPIC TAGS: dog, rat, induced radiation effect, cosmic radiation biologic effect, proton radiation biologic effect, relative biologic efficiency

ABSTRACT: With space flights of longer duration, cosmic rays, radiation belts and solar flares present an increasing danger to astronauts. However, relatively little is known of the biologic effect of cosmic radiation and its components, particularly high energy protons. In the present study the RBE of high energy protons was compared in large laboratory animals (dogs) and small laboratory animals (rats) to determine possible RBE differences. In a series of experiments groups of dogs were irradiated with high energy protons and X-irradiation (or gamma irradiation) in fractional and

Card 1/2

L 11275-67

ACC NR: A36029633

single doses of 250 to 650 rads; groups of rats (Wistar line) were also irradiated in fractional and single doses of 300 to 1200 rads. A synchrocyclotron was used for proton irradiation (510 Mev, field diameter 40 cm, dose rate of 1 rad/sec). Clinical symptoms, histological investigations, EEG data, mean survival periods, and post mortem examinations served as indices. Results show that with fractional dose irradiation of dogs, the RBE of proton irradiation (510 Mev) and X-irradiation (180 kv) is the same (1.0). With fractional irradiation of rats, the RBE of proton irradiation is 0.8. With single dose irradiation of dogs, the RBE of protons is 1.15 compared to gamma irradiation. With single dose irradiation of rats, the RBE of protons is 0.75 compared to gamma irradiation. No conclusions are drawn. Orig. art. has: 4 tables and 6 figures.

SUB CODE: 06/ SUBM DATE: 23Apr66/ ORIG REF: 004/ OTH REF: 004

Card 2/2

LEBEDINSKIY, B.

AUTHOR: Lebedinskiy, B.

133-58-3-23/29

TITLE: From the Experience of the Research Laboratory on the Organisation of Production and Labour (Opyt raboty issledovatel'skoy laboratorii po organizatsii proizvodstva i truda)

PERIODICAL: Stal', 1958, Nr 3, pp 256 - 257 (USSR)

ABSTRACT: Some examples of the activity of the research laboratory on the organisation of production and labour on the Stalin Works are given. The laboratory was organised in 1955.

ASSOCIATION: Stalinskiy metallurgicheskiy zavod (Stalino Metallurgical Works)

AVAILABLE: Library of Congress
Card 1/1

KATSEN, Leontiy Grigor'yevich; APTEKAR', Saveliy Semenovich; KOVAL',
Trofim Fedotovich; LEBEDINSKIY, Boris Ivanovich; SHALGANOVA,
V.N., red.; SAMOLETOVA, A.V., tekhn. red.

[A new wage system in metallurgical plants] Novaya sistema op-
laty truda na metallurgicheskikh zavodakh. Stalino, Stalinskoe
oblastnoe knizhnoe izd-vo, 1959. 108 p. (MIRA 14:10)
(Volgograd Province--Wages--Steel industry)

LEBEDINSKIY, G.A., insh.

Efficient utilization of metal waste due to machining on
lathes. Mashinostroitel' no.12:23 D '59. (MIRA 13:3)
(Turning)

AKHMEDZHANOV, Ye.S.; LEBEDINSKIY, G.L.

Radiometric sampling of blastholes in the pit of a complex ore mine. Uch. zap. SAIGIMSa no.8:59-61 '62. (MIRA 17:1)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut geologii i mineral'nogo syr'ya, Tashkent.

AKHMEDZHANOV, Ye.S.; LEBEDINSKIY, G.L.

Coreless rotary test drilling instead of cable drilling. Uch. zap.
SAIGIMS~~g~~ no.7:217-221 '62. (MIRA 17:2)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut geologii i mineral'nogo syr'ya, Tashkent.

LEREDITSAY, I. B., jr. au.

Tractor KHTZ-7; handbook on its mechanisms and maintenance. Moskva, Gos nauchno-
tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1953. 198 p. (54-2,412)

TL233.5.K3